

## **03084 ADVANCED PROGRAMS IN EDUCATIONAL COMPUTING AND TECHNOLOGY LEADERSHIP**

Institutions will be expected to demonstrate the use of performance assessments within their programs. Examples of such assessments will be provided by the Education Standards and Practices Board as guidelines. Institutions are not restricted to using the given examples, but may develop others that demonstrate candidates' ability to apply what they have learned in the K-12 school setting.

**03084.1** The advanced program requires as a prerequisite that candidates document knowledge and competencies contained in the standards for basic programs Instructional Technology including foundations in instructional technology, specialty area applications, integration of technology with teaching and learning, and appropriate selection and management of technological resources.

**03084.2** The advanced program requires the study of research and theory in educational computing and technology. The program uses varied performance assessments of the candidate's understanding and ability to apply that knowledge.

Examples of performance assessments may include how to:

- identify significant educational and technology-related research and describe the implications of that research for K-12 classrooms;
- apply the psychology of learning and instructional design principles in guiding the use of computers and technology in education;
- identify research related to human and equity issues concerning the use of computers and related technologies in education;
- design a research project that includes evaluating the use of a specific technology in a K-12 environment.

**03084.3** The advanced program requires the study of instructional design and product development. The program uses varied performance assessments of the candidate's understanding and ability to apply that knowledge.

Examples of performance assessments may include how to:

- evaluate authoring and programming environments for use in the classroom;
- describe the characteristics and uses of current programming and scripting environments and evaluate their appropriateness for classroom use;
- apply instructional design principles to the design of screens, text, graphics, audio, and video in instructional products under development;
- apply instructional design principles to develop, implement, and test interactive multimedia instructional products using authoring environments.

**03084.4** The advanced program requires advanced study of information access and delivery. The program uses varied performance assessments of the candidate's understanding and ability to apply that knowledge.

Examples of performance assessments may include how to:

- design a plan to implement information access and delivery resources in K-12 schools to support the curriculum;

- use and implement distance learning delivery systems including computer, audio, and video conferencing;
- install, configure, and use local mass storage devices and media to store and retrieve information and resources;
- describe issues related to selecting, installing, and maintaining WANs for school districts.

**03084.5** The advanced program requires advanced study of operating systems and the selection of software and hardware and its installation and maintenance. The program uses varied performance assessments of the candidate's understanding and ability to apply that knowledge.

Examples of performance assessments may include how to:

- demonstrate installation, customization, and configuration of operating systems of computers and computer networks in school settings;
- identify and implement software in classroom and administrative environments;
- identify and classify adaptive and assistive hardware and software for students and teachers with special needs and locate sources to assist in procurement and implementation;
- design an investigation of issues related to school/site planning, purchasing, and technology integration.

**03084.6** The advanced program requires professional preparation in educational computing and technology leadership. Programs require studies of and experiences with leadership, staff development, and supervisory concepts and skills as they relate to the use of technology-based systems in K-12 education. The program uses varied performance assessments of the candidate's understanding and ability to apply that knowledge.

Examples of performance assessments may include how to:

- combine leadership skills and concepts with knowledge about the use of computers and related technologies in schools;
- develop curricular plans based on local, state, and national standards, for the use of computers and other associated technologies;
- apply effective methods and strategies for teaching the use of technology tools;
- demonstrate knowledge of issues and models related to leadership in staff development;
- plan and design technology-related staff development activities for educational settings;
- demonstrate knowledge of issues related to facilities and resource management;
- demonstrate knowledge of strategies for and issues related to managing the change process in schools.

**3084.7** The advanced program requires field experiences in the use and application of educational technologies for teaching and administration in K-12 school settings. Candidates participate in field experiences that allow them to observe the use of

technology to support instruction, the management of technology resources in educational settings, and the evaluation of effectiveness of technology resources for teaching and learning; and apply technology resources to support instruction in classroom settings.

#### History

Revised August 12, 2005, mandatory for visits July 1, 2006.

Effective date March 2000, mandatory for visits March 2002.